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VITAMIN VALUES OF FOODS

In Terms of COMMON MEASURES

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VITAMIN VALUES OF FOODS
IN TERMS OF COMMON MEASURES

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What is the vitamin value of a pound of beans, a serving of meat, a 100-gram portion of fruit?

Now that a quantitative system of measuring the vitamin content of food is generally accepted, such questions naturally follow. They come from military men calculating rations for the armed forces—from nutritionists and dietitians planning diets for individuals and civilian group feeding—from food economists applying the nutrition yardstick to diet records and planning future food supplies.

To meet these varied demands, the following tables were compiled. The chief source used was United States Department of Agriculture Circular 638[1] supplemented by values reported in the literature during 1941.

The aim is to furnish average working values of the vitamin content of raw and cooked or processed foods in terms of International Units or, in the case of the vitamins for which International Unit values have not yet been established, in terms of actual weights. Consequently, the number of foods and the number of vitamins are limited.

Data for foodstuffs grown in the United States were selected whenever possible, since these tables will be used primarily for planning and evaluating human dietaries in this country. Values obtained on foods grown in other lands may not be equally applicable. In some cases, however, where the data were insufficient, values from foreign sources were used.

It is important to note also that no conclusions can be drawn from the figures presented in these tables as to the effect of cooking or processing on vitamin values by comparing those for a given food in the raw, cooked, or processed state, since in nearly all instances these were neither matched samples nor representative of the same number of samples. Whenever the cooking method was described, it is given in the tables. In most instances, the cooking liquid was discarded, hence the values represent figures for the food alone. When the

[1] BOOHER, L. E., HARTZLER, E. R., and HEWSTON, E. M. A COMPILATION OF THE VITAMIN VALUES OF FOODS IN RELATION TO PROCESSING AND OTHER VARIANTS. U. S. Dept. Agr. Cir. 638, 244 pp. 1942.

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cooking was done in the saucepan type of pressure cooker, the volume of water usually was so small that most authors included it as part of the sample.

Many of the values reported here are not averages but represent a single assay or investigation from a single laboratory. The compilers are conscious of the fact that the method of selecting such values may not be wholly satisfactory. But in the face of lack of data based on a large number of cases, it became a matter of judgment whether to take what was available or omit data on that food entirely. Therefore figures of this kind must be accepted with reservation.

What is a common serving of a given food was not an easy matter to decide either. Dietetic manuals differ widely on this point. The measures here used are the result of consulting many well-known texts plus the findings of the Bureau of Home Economics' own laboratories. The effort throughout was to adopt a reasonably accurate weight for the edible portion of the foods raw in relation to common servings of foods when cooked.

The food items listed in the table are of average or medium size unless otherwise specified. This is true also of size of servings.

The following abbreviations have been used:

In., inch.
I. U., International Unit.
Mg., milligram.
Mcg., microgram.
Med., medium.
Ml., milliliter.
Oz., ounce.
Pt., pint.
Serv., serving.
T., tablespoon.
t., teaspoon.

Vitamin content of raw, cooked, and processed foods

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a comuou serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
	I. U.	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Almonds	[1] 1,100	[1] 250	--			[1] 0	[1] 1,000				1 cup, shelled	120	4.2	[1] 0	[1] 300	--		
Apples:																		
Raw:																		
Pared	80	[1] 25	4		[1] 30	340	[1] 110	20		[1] 140	1 small	80	2.8	60	[1] 20	3		[1] 20
Unpared			5		[1] 30			25		[1] 140	1 small	100	3.5			5		[1] 30
Baked, unpared			[1] 3					[1] 15			1 small	100	3.5			[1] 3		
Frozen	[1] 35					[1] 160												
Apple juice:																		
Canned, commercial			[1] [2] 1					[1] [2] 3										
Applesauce:																		
Canned, commercial			[1] 1					[1] 4			½ cup	100	3.5			[1] 1		
Cooked			3.5					16			½ cup	100	3.5			3.5		
Apricots:																		
Raw	[1] 4,000	[1] 60	[1] 6		[1] 90	[1] 18,200	[1] 270	[1] 25		[1] 410	2	60	2.1	[1] 2,400	[1] 36	[1] 4		[1] 50
Dried	[1] 5,800	[1] 170				[1] 26,300	[1] 780											
Stewed		[1] 100	[1] 7				[1] 440	[1] 30										
Canned, commercial, peeled			[1] 5					[1] 25										
Canned, home, peeled			[1] 6					[1] 25										
Artichokes:																		
Raw:																		
Globe		[1] 280					[1] 1,300											
Jerusalem		[1] 230					[1] 1,000											

[1] Value represents work from a single laboratory.

[2] Value per 100 ml.

[3] Value per pt.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Asparagus:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Raw, green		190	60				840	290			6 stalks	100	3.5		190	60		
Canned, commercial		[1] 70	[1] 30		[1] 130		[1] 310	[1] 130		[1] 590	6 stalks	100	3.5		[1] 70	[1] 30		[1] 130
Reheated green tips			[1] 25					[1] 110			6 stalks	100	3.5			[1] 25		
Frozen	[1] 700	[1] 150			[1] 130	[1] 3,200	[1] 700			[1] 590	6 stalks	100	3.5	[1] 700	[1] 150			[1] 130
Pressure-cooked, green	[1] 910		[1] 15			[1] 4,140		[1] 70			6 stalks	100	3.5	[1] 910		[1] 15		
Avocados	[1] 130	[1] 100	[1] 30			[1] 580	[1] 460	[1] 130			½	100	3.5	[1] 130	[1] 100	[1] 30		
Bacon:																		
Raw (71 percent visible fat).		[1] 480					[1] 2,200				4 slices, med. thick	28	1		[1] 130			
Fried crisp		[1] 720					[1] 3,300				4 slices, med. thick	40	1.4		[1] 290			
Bananas:																		
Raw	410	50	10		70	1,900	240	45		300	1 small	100	3.5	410	50	10		70
Baked without skin			[1] 5					[1] 20			1 small	86	3.0			[1] 4		
Barcelona nuts		[1] 110					[1] 520											
Barley:																		
Raw:																		
Germ		[1] 4,200					[1] 19,100											
Whole grain		610					2,800											
Cooked:																		
Pearled		[1] 25					[1] 110											
Beans:																		
Raw:																		
Kidney, green, snap	970	80	20		[1] 90	4,400	350	90		[1] 420	1 cup	100	3.5	970	80	20		[1] 90
Kidney, wax	[1] 800	[1] 90	20		[1] 100	[1] 3,600	[1] 390	100		[1] 460	1 cup	130	4.6	[1] 1,200	[1] 110	30		[1] 130
Lima, immature		270	40				1,200	190			⅔ cup	100	3.5		270	40		

Boiled:																			
Kidney, green, snap	[1] 1,200	80	[1] 15			[1] 5,400	340	[1] 60			½ cup	100	3.5	[1] 1,200	80	[1] 14			
Lima, immature			[1] 15					[1] 80			⅔ cup	100	3.5			[1] 15			
Canned, commercial:																			
Kidney, green, snap			8.5					40			½ cup	100	3.5			8.5			
Kidney, wax			[1] 4					[1] 20			½ cup	100	3.5			[1] 4			
Lima, immature		[1] 35	[1] 5				[1] 160	[1] 20			⅔ cup	100	3.5		[1] 35	[1] 5			
Reheated:																			
Kidney, green, snap			[1] 3					[1] 15			½ cup	100	3.5			[1] 3			
Lima, green			[1] 10					[1] 60			⅔ cup	100	3.5			[1] 10			
Strained:																			
Kidney, green, snap	[1] 950	[1] 30	[1] 3			[1] 4,300	[1] 140	[1] 15			½ cup	100	3.5	[1] 950	[1] 30	[1] 3			
Canned, home:																			
Kidney, green, snap			10					45			½ cup	100	3.5			10			
Reheated:																			
Kidney, green, snap	[1] 1,000	[1] 60	[1] 5			[1] 4,500	[1] 270	[1] 25			½ cup	100	3.5	[1] 1,000	[1] 60	[1] 5			
Dry:																			
Kidney, mature	[1] 0	520				[1] 0	2,400												
Boiled:																			
Kidney, mature		[1] 220			[1] 800		[1] 1,000			[1] 3,600	½ cup	100	3.5		[1] 220				[1] 800
Canned, commercial, baked.		[1] 90					[1] 410				½ cup	100	3.5		[1] 90				
Home-baked.																			
Kidney		[1] 120					[1] 540				½ cup	100	3.5		[1] 120				
Frozen:																			
Kidney, green, snap			[1] 6					[1] 30											
Kidney, wax	[1] 1,200					[1] 5,600													
Lima, immature	[1] 1,800	[1] 90	[1] 25			[1] 8,200	[1] 420	[1] 120											
Cooked:																			
Kidney, green, snap			[1] 5					[1] 25			½ cup	100	3.5			[1] 5			
Pressure-cooked:																			
Kidney, green, snap	[1] 1,700					[1] 7,600					½ cup	100	3.5	[1] 1,700					
Kidney, wax	[1] 350					[1] 1,600					½ cup	100	3.5	[1] 350					
Lima, immature	[1] 270					[1] 1,200					⅔ cup	100	3.5	[1] 270					

[1] Value represents work from a single laboratory.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
	I. U.	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Beef, lean muscle:																		
Raw	[1] Nil	200	[1] 0		[1] 240	[1] Nil	920	[1] 0		[1] 1,100	1 serv	113.6	4.0	[1] Nil	230	[1] 0		[1] 270
Broiled 20 minutes		[1] [4] 150					[1] [4] 670											
Fried 20 minutes		[1] [4] 290			[1] [4] 180		[1] [4] 1,320			[1] [4] 820								
Roasted 2½ hours		[1] [4] 130			[1] [4] 160		[1] [4] 600			[1] [4] 750	1 serv	100	3.5		[1] [4] 130			[1] [4] 160
Beef organs (see Brains, Liver, etc.)																		
Beer:																		
Dark variety		[1] [2] 9					[1] [3] 45				1 large glass	[5] 230	[6] 7.8		[1] 20			
Light variety			[1] 0					[1] 0			1 large glass	[5] 230	[6] 7.8			[1] 0		
Beets:																		
Raw, dark red	[1] 100	[1] 50	15		[1] 25	[1] 450	[1] 230	70		[1] 100	⅔ cup	100	3.5	[1] 100	[1] 50	15		[1] 25
Canned, commercial			[1] [4] 15					[1] [4] 60			½ cup	80	2.8			[1] [4] 10		
Strained		[1] 10					[1] 50				½ cup	80	2.8		[1] 8			
Pressure-cooked			[1] 10					[1] 50			½ cup	80	2.8			[1] 9		
Beet greens:																		
Raw			[1] 35		[1] 80			[1] 150		[1] 370	1 cup	100	3.5			[1] 35		[1] 80
Pressure-cooked	[1] 15,200					[1] 68,800					½ cup	100	3.5	[1] 15,200				
Blackberries	[1] 80	[1] 25	[1] 7			[1] 380	[1] 110	[1] 30			1 cup	100	3.5	[1] 80	[1] 25	[1] 7		
Blueberries:																		
Raw	100	[1] 45	[1] 6			450	[1] 200	[1] 25			⅔ cup	100	3.5	100	[1] 45	[1] 6		
Frozen	80					360												
Brains:																		
Raw:																		
Beef		[1] 180			250		[1] 810			1,100								
Sheep		[1] 100					[1] 470											

Brazil nuts		[1] 1,000					[1] 4,600				2, shelled	14	0.5		[1] 140		
Bread:																	
Baked:																	
Rye		[1] 160					[1] 740				1 thick slice	40	1.4		[1] 70		
Baked, commercial:																	
Wheat, white		60					300				1 slice	25	0.9		15		
Wheat, white, enriched		240					1,100				1 slice	25	0.9		[1] 60		
Wheat, whole		240	0				1,100	0			1 slice	30	1.1		70	[1] 0	
Broccoli:																	
Raw		[1] 100	120		[1] 220		[1] 450	560		[1] 990	2 stalks	67	2.4		[1] 70	80	[1] 150
Boiled			[1] 60					[1] 280			½ cup	100	3.5			[1] 60	
Frozen	[1] 4,700					[1] 21,200											
Boiled			[1] 60					[1] 250			½ cup	100	3.5			[1] 60	
Pressure-cooked	[1] 2,800					[1] 12,800					½ cup	100	3.5	[1] 2,800			
Brussels sprouts:																	
Raw		[1] 170	140				[1] 780	690			6	100	3.5		[1] 170	140	
Boiled			[1] 90					[1] 430			6	70	2.5			[1] 70	
Canned, commercial			[1] 50					[1] 220			6	70	2.5			[1] 35	
Frozen, pressure-cooked	[1] 570					[1] 2,600					6	70	2.5	[1] 400			
Buckwheat:																	
Flour, whole		[1] 740					[1] 3,400										
Whole grain		[1] 600					[1] 2,700										
Burdock greens			[1] 70					[1] 320									
Butter:																	
Irrespective of season	[1] 4,600	[1] 3	0	35		[1] 20,900	[1] 15	0	150		2 pats	14	0.5	[1] 640	[1] 0.4	0	5
											1 T	12.6	0.4	[1] 580	[1] 0.4	0	4
Summer-produced	[1] 5,900			55		[1] 26,800			250		2 pats	14	0.5	[1] 830			8
											1 T	12.6	0.4	[1] 740			7
Winter-produced	3,300			8		15,100			35		2 pats	14	0.5	470			1
											1 T	12.6	0.4	420			1
Cabbage:																	
Raw	[1] 100	80	80		[1] 50	[1] 450	370	380		[1] 250	¾ cup shredded	57	2.0	[1] 60	45	50	[1] 30
Red	[1] 40		50			[1] 180		220			¾ cup shredded	57	2.0	20		30	
Savoy		[1] 210	35				[1] 950	160			¾ cup shredded	57	2.0		[1] 120	20	

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[4] Value on raw-weight basis.
[5] Value in ml.
[6] Fluid oz.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Cabbage—Continued.	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Boiled		[1] 60	20				[1] 290	90			½ cup	100	3.5		[1] 60	20		
Savoy			[1] [4] 15					[1] [4] 60			½ cup	100	3.5			[1] [4] 15		
Bleached		[1] 70					[1] 300				¾ cup shredded	57	2.0		[1] 40			
Cooked:																		
Red			[1] [4] 35					[1] [4] 150			½ cup	100	3.5			[1] [4] 35		
Frozen	[1] 300					[1] 1,400												
Panned			[1] 20					[1] 90			½ cup	100	3.5			[1] 20		
Pressure-cooked	[1] 160		[1] 40			[1] 710		[1] 195			½ cup	100	3.5	[1] 160		[1] 40		
Steamed			25					110			½ cup	100	3.5			[1] 25		
Savoy			[1] [4] 20					[1] [4] 100			½ cup	100	3.5			[1] [4] 20		
Carrots:																		
Raw	14,400	60	7		[1] 70	65,600	300	35		[1] 300	¾ cup diced	100	3.5	14,400	60	7		[1] 70
											1	45	1.6	6,500	30	3		[1] 30
Boiled		[1] 70	4				[1] 300	15			½ cup	100	3.5		[1] 70	4		
Canned, commercial	[1] 25,000		[1] 2			[1] 113,700		[1] 8			½ cup	100	3.5	[1] 25,000		[1] 2		
Strained	[1] 6,400	[1] 30	[1] 4			[1] 29,200	[1] 140	[1] 15			½ cup	100	3.5	[1] 6,400	[1] 30	[1] 4		
Frozen	[1] 3,500					[1] 15,900												
Pressure-cooked	[1] 11,000	[1] 60	[1] 3			[1] 49,800	[1] 270	[1] 12			½ cup	100	3.5	[1] 11,000	[1] 60	[1] 3		
Steamed			[1] 5					[1] 25			½ cup	100	3.5			[1] 5		
Cashew nuts					[1] 190					[1] 860								
Cauliflower:																		
Raw	[1] 70	[1] 170	90		[1] 800	[1] 320	[1] 760	430		[1] 3,600	¼ small head	78	2.8	[1] 50	[1] 130	70		[1] 620
Canned, commercial		[1] 150	[1] 25				[1] 220	[1] 110			½ cup	60	2.1		[1] 30	[1] 15		
Cooked		[1] 50	[1] 40				[1] 240	[1] 190			½ cup	60	2.1		[1] 30	[1] 25		

Celery:																		
Raw	[1] Nil	40	8.0		[1] 35	[1] Nil	180	35		[1] 160	2 stalks or hearts	50	1.8	[1] Nil	20	4		[1] 20
Boiled			[1] 3					[1] 15			½ cup	66	2.4			[1] 2		
Dried			[1] 40					[1] 190										
Chard:																		
Raw			[1] 40		[1] 140			[1] 180		[1] 630	1 cup	67	2.4			[1] 25		[1] 90
Boiled			[1] 15					[1] 60			½ cup	100	3.5			[1] 15		
Pressure-cooked	[1] 14,000					[1] 63,700					½ cup	100	3.5	[1] 14,000				
Cheese:																		
American Cheddar	1,700	[1] 40	[1] Nil			7,800	[1] 190	[1] Nil			1 serv	28.4	1	490	[1] 10	[1] Nil		
Camembert	[1] 3,600	[1] Nil				[1] 16,400	[1] Nil				1 serv	28.4	1	[1] 1,000	[1] Nil			
Cheshire		[1] 35					[1] 150				1 serv	28.4	1		[1] 90			
Cream	[1] 2,200					[1] 10,100					1 serv	28.4	1	[1] 630				
Dutch		[1] 20					[1] 80				1 serv	28.4	1		[1] 5			
Edam	[1] 1,800					[1] 8,100					1 serv	28.4	1	[1] 510				
Gäorgonzola		[1] 10					[1] 50				1 serv	28.4	1		[1] 3			
Gruyère		[1] 6					[1] 25				1 serv	28.4	1		[1] 2			
Liederkranz	[1] 3,400					[1] 15,600					1 serv	28.4	1	[1] 980				
Limburger	[1] 1,400					[1] 6,200					1 serv	28.4	1	[1] 390				
Parmesan		[1] Nil					[1] Nil				1 serv	28.4	1		[1] Nil			
Pimento	[1] 2,400					[1] 10,700					1 serv	28.4	1	[1] 670				
Roquefort	[1] 4,000	[1] 30				[1] 18,200	[1] 140				1 serv	28.4	1	[1] 1,100	[1] 9			
Stilton		[1] 25					[1] 110				1 serv	28.4	1		[1] 7			
Swiss	2,300					10,500					1 serv	28.4	1	660				
Cherries:																		
Raw		[1] 50					[1] 230				12, stoned	75	2.6		[1] 40			
Canned, commercial			[1] [4] 3					[1] [4] 15										
Canned, home:																		
Black			[1] 6					[1] 30										
Chestnuts		[1] 270					[1] 1,200											
Chicken:																		
Raw	[1] Nil		[1] 4		[1] 50	[1] Nil		[1] 20		[1] 240	1 serv	113.6	4	[1] Nil		[1] 4		[1] 60
Dark meat		[1] 110					[1] 500				1 serv	113.6	4		[1] 130			
Light meat		[1] 80					[1] 350				1 serv	113.6	4		[1] 90			
Roasted:																		
Dark meat		[1] 50					[1] 230				1 serv	100	3.5		[1] 50			

[1] Value represents work from a single laboratory.

[4] Value on raw-weight basis.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Chicken organs (see Brains, Liver, etc.).	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Chives			50					220										
Citrus fruit:																		
Raw:																		
Calamondin orange			[1] [2] 35					[1] [3] 175			½	100	3.5			[1] 35		
											1 large glass juice	[5] 230	[3] 7.8			[1] 85		
Grapefruit			[2] 35					[3] 170			½	100	3.5			35		
											1 large glass juice	[5] 230	[6] 7.8			85		
Kumquat			[2] 20					[3] 85										
Lemon	[1] [2] Nil	[1] [2] 20	[2] 30		[2] 4	[1] [3] Nil	[1] [3] 85	[3] 130		[3] 20	1 cup juice	[5] 226	[6] 7.8	[1] Nil	[1] 45	65		10
Lime			[2] 25					[3] 120			1 cup juice	[5] 240.8	[6] 8.1			60		
Limequat			[2] 20					[3] 95										
Orange (sweet variety)	[2] 60	[2] 100	[2] 45		[1] [2] 30	[3] 290	[3] 480	[3] 220		[1] [3] 140	1	100	3.5	60	100	45		[1] 30
											½ cup juice	[5] 116.6	[6] 3.9	70	120	55		[1] 35
Orange, navel (sweet variety).	[1] [2] 250					[1] [3] 1,200					1	100	3.5	[1] 250				
											½ cup juice	[5] 116.6	[6] 3.9	[1] 290				
Tangelo orange			[2] 40					[3] 190										
Tangerine orange	[1] [2] 350		[2] 30			[1] [3] 1,600		[3] 150			1 small	50	1.8	[1] 170		15		
											½ cup juice	[1] 120	[6] 4.1	[1] 410		35		
Canned, commercial:																		
Grapefruit juice			[2] 30		[1] [2] 10			[3] 150		[1] [3] 60								
Lemon juice			[1] [2] 50					[1] [3] 250										
Orange juice			[2] 35					[3] 160										
Clams	[1] 200		[1] 6		[1] 120	[1] 910		[1] 25		[1] 540	6	100	3.5	[1] 200		[1] 6		[1] 120
Cocoa		[1] 70					[1] 340				2 T	6	0.2		[1] 5			

Coconut		[1] 30	1				[1] 140	6										
Cod		[1] 120	[1] 2		[1] 80		[1] 540	[1] 9		[1] 380	1 serv	113.6	4		[1] 140	[1] 2		[1] 100
Collards:																		
Raw	[1] 8,800	[1] 200				[1] 40,000	[1] 910				⅔ cup	100	3.5	[1] 8,800	[1] 200			
Pressure-cooked	[1] 12,200					[1] 55,400					½ cup	100	3.5	[1] 12,200				
Corn:																		
Raw:																		
Field, mature					250					1,200								
Sweet	[1] 280	160	10			[1] 1,300	710	45			½ cup	50	1.8	[1] 140	80	5		
											1 ear	100	3.5	[1] 280	160	10		
Canned, commercial:																		
Cream-style:																		
Sweet			6					25			½ cup	80	2.8			5		
Reheated			[1] 8					[1] 35			½ cup	80	2.8			[1] 6		
Whole-kernel:																		
Sweet			8					35			½ cup	80	2.8			[1] 6		
Reheated			[1] 6					[1] 30			½ cup	80	2.8			[1] 5		
Canned, home:																		
Sweet	[1] 120	[1] 50	[1] 15			[1] 540	[1] 240	[1] 60			½ cup	80	2.8	[1] 100	[1] 45	[1] 10		
Reheated			[1] 8					[1] 35			½ cup	80	2.8			[1] 6		
Cooked:																		
Sweet			[1] 8					[1] 35			½ cup	80	2.8			[1] 6		
											1 ear	120	4.2			[1] 10		
Dried:																		
Field, mature	120	530				530	2,400											
Sweet			[1] 2					[1] 10										
Cooked	[1] 280	[1] 50	[1] 5			[1] 1,300	[1] 240	[1] 25										
Frozen:																		
Sweet			9					40										
On the cob			10					45										
Boiled			[1] 8					35			½ cup	80	2.8			[1] 6		

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[4] Value in ml.
[5] Fluid oz.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
	I. U.	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Corn meal:																		
Whole-ground	[1] 330					[1] 1,500					3 T	37.4	0.9	[1] 90				
White		[1] 300					[1] 1,400				3 T	27.4	0.9		[1] 80			
Yellow		[1] 230					[1] 1,100				3 T	27.4	0.9		[1] 65			
Cowpeas:																		
Raw	600					2,700												
Dry	30	900				140	4,100											
Crabs:																		
Canned, commercial		[1] 230	[1] Nil		[1] 150		[1] 1,000	[1] Nil		[1] 680	⅔ cup	100	3.5		[1] 230	[1] Nil		[1] 150
Crackers:																		
Graham		[1] 70	[1] 0				[1] 340	[1] 0			2 crackers	20	0.7		[1] 15	[1] 0		
Cranberries:																		
Raw	[1] 70					[1] 320					½ cup	55	1.9	[1] 40				
Cooked			[1] 6					[1] 25			¼ cup	60	2.1			[1] 3		
Cream:																		
Pasteurized:																		
Summer-produced	[1] [2] 1,600		[1] [2] 0			[1] [3] 7,800		[1] [3] 0			1 T	15	0.5	[1] 250		[1] 0		
Cucumbers	[1] Nil	[1] 50			[1] 45	[1] Nil	[1] 250			[1] 200	½, peeled	50	1.8	[1] Nil	[1] 25			[1] 20
Currants:																		
Raw:																		
Black			180					840			½ cup	100	3.5			180		
Red	[1] 120		30			[1] 540		130			½ cup	100	3.5	[1] 120		30		
Canned, commercial:																		
Black			130					610										
Currant juice:																		
Boiled:																		
Black			[2] 120					[3] 590										

Dandelion greens:																		
Raw:																		
Spring			[1] 150					[1] 700			1 cup	80	2.8			[1] 120		
Summer			[1] 30					[1] 140			1 cup	80	2.8			[1] 25		
Pressure-cooked	[1] 9,500					[1] 43,200					½ cup	100	3.5	[1] 9,500				
Dates:																		
Raw	70					330												
Packaged	60	[1] 70	[1] 0			270	[1] 330	[1] 0										
Dock		[1] 70	[1] 160				[1] 340	[1] 710										
Eggplant	[1] Nil		[1] 12		[1] 30	[1] Nil		[1] 50		[1] 140	⅔ cup diced	55	1.9	[1] Nil		[1] 7		[1] 20
Eggs, whole:																		
Raw:																		
Irrespective of season	[1] 1,000	[1] 260	0		520	[1] 4,500	[1] 1,200	0		2,360	1	45	1.6	[1] 450	[1] 115	0		235
Summer	[1] 1,400					[1] 6,400					1	45	1.6	[1] 630				
Winter	[1] 600					[1] 2,800					1	45	1.6	[1] 280				
Dried				[1] 220					[1] 1,000									
Eggs, white:																		
Irrespective of season		[1] Nil			400		[1] Nil			1,800	1	30	1.1		[1] Nil			120
Eggs, yolk:																		
Raw:																		
Irrespective of season	[1] 2,600	420		[1] 320	[1] 760	[1] 12,000	1,900		[1] 1,500	[1] 3,400	1	15	0.5	400	60		[1] 50	[1] 115
Summer	3,400					15,400					1	15	0.5	500				
Winter	[1] 1,880					[1] 8,540					1	15	0.5	[1] 280				
Boiled		[1] 420					[1] 1,900				1	15	0.5		[1] 60			
Endive:																		
Raw	[1] 3,800	[1] 60	15		[1] 60	[1] 17,500	[1] 260	60		[1] 280								
Bleached		[1] 100					[1] 450											
Pressure-cooked	[1] 5,200					[1] 23,600					10 small leaves			[1] 1,300				
Figs:																		
Raw		[1] 60	[1] 2				[1] 260	[1] 8			3	75	2.6		[1] 40	[1] 1		
Dried	[1] 110	[1] 300				[1] 520	[1] 1,400											
Garlic			[1] 15					[1] 60										

[1] Value represents work from a single laboratory. [2] Value per 100 ml. [3] Value per pt.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Gooseberries:																		
Raw:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Green, ripe	[1] 380		35			[1] 1,700		150			½ cup	60	2.1	[1] 230		20		
Red, ripe			30					140			½ cup	60	2.1			20		
Canned, commercial			[1] 25					[1] 110			½ cup	140	4.9			[1] 35		
Grapefruit (see Citrus fruit).																		
Grapes	[1] 50	[1] 60	4		[1] 60	[1] 230	[1] 270	20		[1] 280	1 bunch, 24	100	3.5	[1] 50	[1] 60	4		[1] 60
Grape juice		[1 2] 30	[1 2] 6		[1 2] 80		[1 3] 130	[1 3] 30		[1 3] 400								
Haddock:																		
Raw	[1] Nil	[1] 9				[1] Nil	[1] 40				1 serv	135.5	4.8	[1] Nil	[1] 10			
Smoked		[1] Nil					[1] Nil											
Halibut		[1] 80					[1] 380				1 serv	80.3	2.8		[1] 70			
Hazelnuts		[1] 230					[1] 1,000											
Heart:																		
Raw:																		
Beef		[1] 670			[1] 760		[1] 3,100			[1] 3,400	1 serv	78.2	2.8		[1] 530			[1] 594
Chicken			[1] 8					[1] 35			1 serv	73.6	2.6			[1] 6		
Pork		[1] 590	[1] 4		[1] 1,100		[1] 2,700	[1] 20		[1] 5,100	1 serv	78.2	2.8		[1] 460	[1] 3		[1] 880
Stewed:																		
Beef	[1] 370	[1 4] 290			[1 4] 750	[1] 1,700	[1 4] 1,300			[1 4] 3,400	1 serv	60	2.1	[1] 220	[1 4] 180			[1 4] 450
Herring:																		
Raw	[1] 110	[1] 6		[1] 1,500	[1] 310	[1] 520	[1] 25		[1] 6,900	[1] 1,400	1	100	3.5	[1] 110	[1] 6		[1] 1,500	[1] 310
Canned				[1] 1,560					[1] 7,100		1	60	2.1				[1] 940	
Smoked	[1] 80			[1] 1,900		[1] 380			[1] 8,700									

Hominy (from white corn)		[1] Nil					[1] Nil				3 T	27.5	0.9		[1] Nil		
Honey, clover	[1] 0					[1] 0					1 in. cube of comb	25	0.9	[1] 0			
Horseradish			[1] 120					[1] 550									
Jam, strawberry:																	
Canned, home			[1] 25					[1] 110									
Kale:																	
Raw	[1] 10,500	[1] 190	130			[1] 47,700	[1] 860	610			1 cup	100	3.5	[1] 10,500	[1] 190	130	
Pressure-cooked	[1] 12,500					[1] 56,600					½ cup	100	3.5	[1] 12,500			
Kidneys:																	
Raw:																	
Beef		[1] 320			2,100		[1] 1,400			9,500	1 serv	87.3	3.1		[1] 280		[1] 1,800
Pork		[1] 520			[1] 2,000		[1] 2,400			[1] 9,000	1 serv	87.3	3.1		[1] 450		[1] 1,700
Sheep		[1] 230					[1] 1,000				1 serv	87.3	3.1		[1] 200		
Stewed:																	
Beef		[1] [4] 190			[4] 1,800		[1] [4] 860			[4] 8,300	1 serv	100	3.5		[1] [4] 190		[1] [4] 1,800
Kohlrabi:																	
Raw			50					230			1; 2⅓ cup ½-in. cubes	100	3.5			50	
Boiled			[1] [4] 9					[1] [4] 40			⅔ cup	100	3.5			[1] [4] 9	
Canned			[1] 0					[1] 0			⅔ cup	100	3.5			[1] 0	
Kumquats (see Citrus fruit).																	
Lamb:																	
Raw:																	
Leg		[1] 440			[1] 300		[1] 2,000			[1] 1,500	1 small serv	43	1.5		[1] 190		[1] 140
Loin chop	[1] Nil	[1] 250				[1] Nil	[1] 1,100				1 small	29.5	1	[1] Nil	[1] 70		
Lamb organs (see Brains, Liver, etc.).																	
Leeks:																	
Raw:																	
Bleached			[1] 20					[1] 80									
Dried			[1] 90					[1] 400									
Lemons (see Citrus fruit).																	
Lentils:																	
Dried		470					2,100										
Pressure-cooked, mature	[1] 45					[1] 190											

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[4] Value on raw-weight basis.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Lettuce:																		
Raw:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Butterhead			[1] 15					[1] 60			¼ head	65	2.3			[1] 9		
											1 large or 2 small leaves	10	0.4			[1] 1		
Cos or Romaine			[1] 15		[1] 100			[1] 70		[1] 440	¼ head	65	2.3			[1] 10		[1] 60
											1 large or 2 small leaves	10	0.4			[1] 2		[1] 10
Crisphead	[1] 210		10			[1] 950		50			¼ head	65	2.3	[1] 140		8		
											1 large or 2 small leaves	10	0.4	[1] 20		1		
Head		80	15		[1] 50		360	60		[1] 220	¼ head	65	2.3		50	9		[1] 30
											1 large or 2 small leaves	10	0.4		8	1		[1] 5
Leaf			20					80			1 large or 2 small leaves	10	0.4			2		
Pressure-cooked:																		
Crisphead	[1] 260					[1] 1,200					½ cup	100	3.5	[1] 260				
Limequats (see Citrus fruit).																		
Limes (see Citrus fruit).																		
Liver:																		
Raw:																		
Beef	49,700	330	[1] 30	[1] 45	3,600	225,500	1,500	[1] 140	[1] 210	16,500	1 serv	75.1	2.7	37,300	250	[1] 25	[1] 35	2,700
Calf	106,200	[1] 150		[1] 9	3,600	482,200	[1] 690		[1] 40	16,600	1 serv	75.1	2.7	[1] 79,800	[1] 110		[1] 7	2,700
Chicken			[1] 30					[1] 130			1 serv.; 1½–2 livers	70.6	2.5			[1] 20		
Lamb	90,300	[1] 410		[1] 15	4,300	410,200	[1] 1,900		[1] 80	19,600								
Pork	[1] 27,800	[1] 1,500	15	[1] 45	2,700	[1] 126,200	[1] 6,800	70	[1] 200	12,300	1 serv	73.5	2.6	[1] 20,400	[1] 1,100	12	[1] 30	2,000
Rabbit, wild	[1] 57,300					[2] 260,100												
Sheep			45		[1] 4,300			200		[1] 19,700								
Turkey	[1] 69,500					[1] 315,500												
Boiled:																		
Beef	[1] 59,500				2,400	[1] 270,100				11,100	1 serv	80	2.8	[1] 47,600				[1] 2,000

Pressure-cooked:																		
Chicken	[1] 26,600					[1] 120,800					1 serv	90	3.2	[1] 23,900				
Loganberries:																		
Raw			[1] 35					[1] 160			½ cup	75	2.6			[1] 25		
Canned, commercial		[1] 35					[1] 150											
Mackerel	[1] 170			[1] 1,100		[1] 790			[1] 5,000		1 small serv	70.5	2.5	[1] 120			[1] 780	
Milk, cow:																		
Dry, skim	[1] 140	[1] 370	[1] 7		2,000	[1] 640	[1] 1,700	[1] 30		9,000								
Dry, whole	[1] 1,600	[1] 310	[1] 8		[1] 2,600	[1] 7,300	[1] 1,400	[1] 40		[1] 11,600								
Fluid:																		
Evaporated:																		
Canned, commercial	[1] [2] 460	[2] 40	[2] 1	[1] [2] 3		[1] [3] 2,200	[3] 190	[3] 6	[1] [3] 15									
Canned (vitamin D milk), irradiated.		[1] [2] 30	[1] [2] 2	[2] 30			[1] [3] 150	[3] 9	[3] 130									
Skim	[1] [2] 15	[1] [2] 40				[1] [3] 80	[1] [3] 200				1 large glass	246	8.7	[1] 40	[1] 100			
Whole:																		
Irrespective of season	[2] 200	[2] 30	[2] 2	[2] 2	[2] 180	[3] 960	[3] 140	[3] 9	[3] 9	[3] 840	1 large glass, 8 oz	244	8.6	490	70	4	5	430
Summer	[2] 230		[2] 1	[1] [2] 3		[3] 1,100		[3] 6	[1] [3] 15		1 large glass, 8 oz	244	8.6	570		3	[1] 8	
Winter	[2] 150		[1] [2] 1	[1] [2] 1		[3] 690		[1] [3] 4	[1] [3] 4		1 large glass, 8 oz	244	8.6	360		[1] 2	[1] 2	
Vitamin D milk	[1] [2] 170		[1] [2] 1	[1] [2] 35		[1] [3] 790		[1] [3] 5	[1] [2] 150		1 large glass, 8 oz	244	8.6	[1] 410		[1] 3	[1] 80	
Millet		720					3,300											
Molasses:																		
Refined cane	[1] Nil	[1] 50			160	[1] [3] Nil	[1] [3] 310			[3] 890	1 T	15	.5	[1] Nil	[1] 8			25
Mushrooms:																		
Raw	[1] Nil	[1] 110	[1] 8			[1] Nil	[1] 520	[1] 35			4 large or 10 small	100	3.5	[1] Nil	[1] 110	[1] 8		
Canned (tin or glass)			[1] [4] 3					[1] [4] 10										
Muskmelons	[1] 2,400	[1] 60	35		[1] 70	[1] 10,800	[1] 260	150		[1] 330	¼	100	3.5	[1] 2,400	[1] 60	30		[1] 70
Mustard greens:																		
Raw	[1] 10,200	[1] 140	170			[1] 46,300	[1] 630	780			1 cup	30	1.1	[1] 3,100	[1] 40	50		
Pressure-cooked	[1] 8,300					[1] 37,900					½ cup	100	3.5	[1] 8,300				
Mutton		[1] 100			[1] 80		[1] 460			[1] 390	1 small serv	42.4	1.5		[1] 45			[1] 35
Oatmeal	[1] Nil	[1] 810				[1] Nil	[1] [3] 700				2 T	24.8	0.8	[1] Nil	[1] 200			

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[4] Value on raw-weight basis.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Oats:																		
Raw:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Rolled		660					3,000				5 T	24.8	0.8		160			
Whole grain		[1] 720					[1] 3,300											
Cooked:																		
Rolled		[1] 100					[1] 450				½ cup	135	4.7		[1] 130			
Okra:																		
Raw		[1] 130	[1] 15				[1] 570	[1] 70			5 pods	50	1.8		[1] 60	[1] 7		
											½ cup sliced	45	1.6		[1] 60	[1] 7		
Pressure-cooked	[1] 2,200					[1] 10,000					½ cup	50	1.8	[1] 1,100				
Olives, green	[1] 1,000					[1] 4,500					6	44.3	1.6	[1] 440				
Onions:																		
Raw	[1] 0	[1] 30	10		[1] 120	[1] 0	[1] 140	50		[1] 560	1	40.4	1.4	[1] 0	[1] 10	5		[1] 50
											1 cup sliced	202	7.1	[1] 0	[1] 60	25		[1] 25
Green			[1] 35					[1] 150										
Cooked		[1] 6	7				[1] 25	35			½ cup	100	3.5		[1] 6	7		
Dried			[1] 20					[1] 100										
Oranges (see Citrus fruit).																		
Oyster:																		
Raw	[1] 210						[1] 950				6	100	3.5	[1] 210				
Frozen	[1] 300			5			[1] 1,400		25									
Stewed	[1] 230						[1] 1,000				5	25	0.9	[1] 60				
Pancreas:																		
Raw:																		
Beef		[1] 320	[1] 15		590		[1] 1,500	[1] 60		2,700								

Papayas	[1] 2,500	[1] 25	[1] 70			[1] 11,300	[1] 110	[1] 330			½	100	3.5	[1] 2,500	[1] 25	[1] 70		
											½ cup juice	120	4.1	[1] 3,000	[1] 30	[1] 90		
Parsley:																		
Raw			160					730			10 sprigs	10	0.4			15		
Dried			[1] 460					[1] 2,100										
Parsnips:																		
Raw:																		
Irrespective of season		[1] 110					[1] 520				1	119	4.2		[1] 140			
Fall			30					140			1	119	4.2			40		
Spring			9					40			1	119	4.2			[1] 10		
Boiled, unpared:																		
Fall			[1] 30					[1] 130			½ cup	80	2.8			[1] 25		
Spring			[1] 9					[1] 40			½ cup	80	2.8			[1] 7		
Pressure-cooked	[1] Nil					[1] Nil					½ cup	80	2.8	[1] Nil				
Pawpaws			[1] 35					[1] 160										
Peaches:																		
Raw	[1] 1,700	[1] 20	8		[1] 60	[1] 7,600	[1] 80	35		[1] 290	1 large	100	3.5	[1] 1,700	[1] 20	8		[1] 60
Canned, commercial			[1] 3					[1] 15										
Canned, home																		
Cold-pack			[1] 3					[1] 15										
Open-kettle			[1] 3					[1] 15										
Dried	[1] 3,400					[1] 15,400												
Stewed			[1] 2					[1] 10										
Frozen	[1] 2,900					[1] 9,100												
Peanuts:																		
Raw:																		
With skin		[1] 1,300					[1] 5,900				¼ cup	32	1.1		[1] 420			
Without skin		[1] 1,100			[1] 460		[1] 5,000			[1] 2,100	¼ cup	32	1.1		[1] 350			[1] 150
Roasted:																		
With red skin		[1] 370					[1] 1,700				¼ cup	30	1.1		[1] 110			
Without skin	[1] Nil	[1] 220	0			[1] Nil	[1] 980	0			¼ cup	30	1.1	[1] Nil	[1] 70	0		
Peanut butter		[1] 230					[1] 1,100											

[1] Value represents work from a single laboratory.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Pears:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Raw	[1] 50	40	3		50	[1] 230	180	15		220	1	100	3.5	[1] 50	40	3		50
Canned, commercial			2					8										
Canned, home:																		
Cold-pack			[1] 2					[1] 7										
Open-kettle			[1] 1					[1] 4										
Peas, green:																		
Raw	[1] 870	410	25		140	[1] 3,900	1,900	120		640	¾ cup	100	3.5	[1] 870	410	25		[1] 140
Canned, commercial		[1] 130	8				[1] 610	35			½ cup	80	2.8		[1] 110	6		
Reheated	[1] 810	[1] 80	9			[1] 3,700	[1] 370	40			½ cup	80	2.8	[1] 650	[1] 70	7		
Strained	[1] 1,000	[1] 90	8			[1] 4,700	[1] 390	35			½ cup	80	2.8	[1] 840	[1] 70	6		
Canned, home			[1] 20					[1] 90			½ cup	80	2.8			[1] 15		
Reheated	[1] 960	[1] 80	20			[1] 4,400	[1] 370	80			½ cup	80	2.8	[1] 770	[1] 70	15		
Cooked		[1] 370	10				[1] 1,700	50			½ cup	80	2.8		[1] 300	9		
Frozen	740	460	18			3,300	2,100	80										
Cooked	[1] 860	[1] 80	10			[1] 3,900	[1] 390	50			½ cup	80	2.8	[1] 690	[1] 70	9		
Pecans	[1] 200					[1] 910					12 meats	14	0.5	[1] 30				
Peppers:																		
Raw:																		
Mild	[1] 870	[1] 60	200			[1] 4,000	[1] 270	920			1	100	3.5	[1] 870	[1] 60	200		
Pungent			170					770			1	100	3.5			170		
Persimmons, Japanese	[1] 2,500		[1] 45			[1] 11,600		[1] 200			1	100	3.5	[1] 2,500		[1] 45		
Pineapples:																		
Raw	[1] 200	[1] 90	45			[1] 910	[1] 410	200			1 slice, ¾ in. thick	100	3.5	[1] 200	[1] 90	45		
Canned, commercial		[1] 30					[1] 140											
Frozen, grated	[1] 50					[1] 250												

Pineapple juice:																		
Raw			[2] 50					[3] 260										
Canned, commercial	[1,2] 70	[1,2] 170	[1,2] 10		[1,2] 20	[1,3] 310	[1,3] 800	[1,3] 50		[1,3] 100								
Plums	[1] 360	[1] 50	[1] 6			[1] 1,600	[1] 220	[1] 25			2	70	2.5	[1] 250	[1] 35	[1] 4		
Pomegranate			[1] 6					[1] 25										
Popcorn:																		
Popped	[1] 500					[1] 2,300					1 cup	15	0.5	[1] 70				
Pork:																		
Raw:																		
Chop	[1] Nil	1,400				[1] Nil	6,400				2	113	4.0	[1] Nil	1,600			
Loin		1,700			[1] 230		7,500			[1] 1,100	1 serv	100	3.5		1,700			[1] 230
Ham, lean		2,300			230		10,300			1,000								
Sausage		[1] 50					[1] 220											
Baked:																		
Ham, lean		[1] 660					[1] 3,000				1 serv	100	3.5		[1] 660			
Boiled:																		
Ham, lean					[1,4] 280					[1,4] 1,300	1 serv	100	3.5					[1,4] 280
Braised:																		
Chop		[1] 1,600					[1] 7,500				1 large	75	2.6		[1] 1,200			
Canned, commercial:																		
Ham		[1] 810			[1] 220		[1] 3,700			[1] 1,000	1 serv	100	3.5		[1] 810			[1] 220
Ground		[1] 470					[1] 2,100				1 serv	100	3.5		[1] 470			
Canned, home:																		
Loin		[1] 350					[1] 1,600				1 serv	100	3.5		[1] 350			
Cured:																		
Ham					250					1,100								
Fried		[1] 1,700			[1,4] 260		[1] 7,600			[1,4] 1,200	1 serv	100	3.5		[1] 1,700			[1,4] 260
Smoked		1,300					6,000											
Fried:																		
Loin		[1,4] 1,200			[1,4] 150		[1,4] 5,400			[1,4] 690	1 serv	100	3.5		[1,4] 1,200			[1,4] 150
Ham, lean		[1,4] 1,500			[1,4] 230		[1,4] 6,900			[1,4] 1,000	1 serv	100	3.5		[1,4] 1,500			[1,4] 230
Roasted:																		
Loin		[1] 1,200			[1,4] 100		[1] 5,400			[1,4] 450	1 serv	100	3.5		[1] 1,200			[1,4] 100

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[4] Value on raw-weight basis.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Pork—Continued.																		
Smoked:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Sausage		[1] 260					[1] 1,200											
(*See also* Bacon.)																		
Pork organs (see Brains, Liver, etc.).																		
Potatoes:																		
Raw:																		
Mature	[1] 40	90	10		[1] 50	[1] 180	430	50		[1] 230	1 large	200	7.0	[1] 80	190	20		[1] 100
New			15					80			1 small	100	3.5			15		
Baked			10					45			1 small	100	3.5			10		
Boiled, pared		60	9				280	40			1 small	100	3.5		60	9		
Dried			[1] 6					[1] 25										
Fried			13					60										
Pressure-cooked	[1] 35		[1] 10			[1] 150		[1] 50			1 small	100	3.5	[1] 35		[1] 10		
Steamed			[1] 15					[1] 70			1 small	100	3.5			[1] 15		
Potato chips:																		
Fried, home			15					70			10 large	15	0.5			[1] 2		
Prunes:																		
Raw	[1] 1,000					[1] 4,500												
Canned, commercial			[1] 3					[1] 15										
Dried	[1] 1,600	150				[1] 7,100	670											
Stewed		[1] 4				[1] 410	[1] 15											
Pumpkin:																		
Pressure-cooked	[1] 1,200					[1] 5,400					½ cup	100	3.5	[1] 1,200				
Rabbit:																		
Raw		[1] 35	[1] 4				[1] 150	[1] 20										
Organs (see Liver, etc.).																		

Radishes:																		
Raw:																		
Irrespective of color		[1] 40			[1] 35		[1] 180			[1] 160	5 small	35	1.2		[1] 15			[1] 10
Red			[1] 25					[1] 110			5 small	35	1.2			[1] 8		
White			[1] 25					[1] 120										
Raisins:																		
Raw	[1] Nil	[1] 110				[1] Nil	[1] 490				⅓ cup	45	1.6	[1] Nil	[1] 50			
Raspberries:																		
Raw:																		
Black	[1] Nil	[1] 25				[1] Nil	[1] 110				⅞ cup	100	3.5	[1] Nil	[1] 25			
Red	[1] 130	[1] 25	[1] 25			[1] 600	[1] 110	[1] 110			⅞ cup	100	3.5	[1] 130	[1] 25	[1] 25		
Canned, commercial		[1] 6	[1] 10				[1] 25	[1] 45			½ cup	100	3.5		[1] 6	[1] 10		
Canned, home			[1] 4					[1] 20			½ cup	100	3.5			[1] 4		
Rhubarb:																		
Raw	[1] 100	[1] 10	15			[1] 450	[1] 50	70			1 cup	100	3.5	[1] 100	[1] 10	15		
Canned, commercial			2					9			½ cup	100	3.5			2		
Cooked			4					20			½ cup	100	3.5			4		
Rice:																		
Raw:																		
Brown	[1] Nil	[1] 420	[1] 0		[1] 120	[1] Nil	[1] 1,900	[1] 0		[1] 550	3 T	30	1.1	[1] Nil	[1] 130	[1] 0		[1] 35
Wild		[1] 600					[1] 2,700				2 T	24	0.8		[1] 140			
Milled and polished:																		
White		20			[1] 80		100			[1] 360	2 T	28	1		6			[1] 20
Unpolished:																		
White					[1] 70					[1] 320								
Roe:																		
Raw:																		
Cod			[1] 45					[1] 200										
Herring		[1] 30					[1] 140											
Canned:																		
Cod				[1] 80	[1] 620				[1] 390	[1] 2,800								
Crab					[1] 810					[1] 3,700								
Cooked:																		
Herring, red					[1] 190					[1] 880								
Smoked:																		
Cod		900					[1] 4,100											

[1] Value represents work from a single laboratory.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Rutabagas:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Raw		70					340				¼ cup diced	100	3.5		70			
Cooked	[1] Nil		[1] 80			[1] Nil		[1] 370			½ cup	100	3.5	[1] Nil		[1] 80		
Rye:																		
Raw:																		
Flour:																		
40-percent extraction		[1] 70					[1] 330				1 cup	140	4.9		[1] 100			
65-percent extraction		[1] 140					[1] 650				1 cup	140	4.9		[1] 200			
94-percent extraction		[1] 300					[1] 1,400				1 cup	140	4.9		[1] 420			
Germ		[1] 2,200					[1] 10,200											
Whole grain	[1] Nil	470				[1] Nil	2,100				1 cup	80	2.8	[1] Nil	380			
Sage			[1] 25					[1] 110										
Salmon:																		
Canned, commercial	[1] 260	[1] 110		[1] 460		[1] 1,200	[1] 520		[1] 2,100		1 serv	100	3.5	[1] 260	[1] 110		[1] 460	
Salted:																		
Red Char				[1] 1,100					[1] 5,100		1 slice	100	3.5				[1] 1,100	
Salsify			[1] 7					[1] 30										
Sardines:																		
Raw	[1] 280			[1] 1,300	[1] 480	[1] 1,300			[1] 5,900	[1] 2,200								
Canned, commercial	[1] 260	[1] 30		1,500		[1] 1,200	[1] 140		6,800									
Smoked	[1] 400			[1] 1,500		[1] 1,800			[1] 6,600									
Sauerkraut:																		
Raw		[1] 30	[1] 30				[1] 140	[1] 130			⅔ cup	100	3.5		[1] 30	[1] 30		
Canned, commercial	[1] 0		15			[1] 0		70			½ cup	80	2.8	[1] 0		15		
Reheated			[1] 20					[1] 90			½ cup	80	2.8			[1] 15		

Sauerkraut juice:																		
Canned, commercial			[1] [2] 8					[1] [3] 35			½ cup	[5] 100	[6] 3.4					
Scallops	[1] Nil					[1] Nil					10 small	100	3.5	[1] Nil				
Shallot:																		
Raw:																		
Green stem			[1] 20					[1] 100										
White bulb			[1] 8					[1] 35										
Shepherd's purse			[1] 130					[1] 590										
Shrimp				[1] 150					[1] 680									
Skunk cabbage			[1] 310					[1] 1,400										
Slender nettle			[1] 100					[1] 460										
Sole:																		
Raw:																		
Dover		[1] 55					[1] 260											
Lemon		[1] 90					[1] 390											
Sow thistle			[1] 60					[1] 290										
Soybeans:																		
Raw:																		
Green	[1] 710	[1] 470	[1] 40			[1] 3,200	[1] 2,100	[1] 190			½ cup	83	2.9	[1] 590	[1] 390	[1] 35		
Mature	[1] 130	1,200				[1] 590	5,300				½ cup	83	2.9	[1] 110	970			
Spinach:																		
Raw	[1] 7,400	110	70		[1] 160	[1] 33,400	520	310		[1] 720	1 cup	100	3.5	[1] 7,400	110	70		[1] 160
New Zealand		[1] 60	30				[1] 290	130			1 cup	100	3.5		[1] 60	30		
Boiled			[1] 30					[1] 150			½ cup	100	3.5			[1] 30		
Canned, commercial		[1] 60	15				[1] 270	80			½ cup	100	3.5		[1] 60	15		
Puree			[1] 45					[1] 190			½ cup	100	3.5			[1] 45		
Reheated			[1] 5					[1] 20			½ cup	100	3.5			[1] 5		
Strained	[1] 12,100	[1] 15	9			[1] 55,200	[1] 80	45			½ cup	100	3.5	[1] 12,100	[1] 15	9		
Cooked		[1] 110					[1] 520				½ cup	100	3.5		[1] 110			
New Zealand			[1] 15					[1] 60			½ cup	100	3.5			[1] 15		

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[5] Value in ml.
[6] Fluid oz.

Vitamin content of raw, cooked, and processed foods—**Continued**

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Spinach—Continued.	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Dried			[1] 40					[1] 180										
Frozen		[1] 100	[1] 45				[1] 460	[1] 210										
Cooked			40					170			½ cup	100	3.5			40		
Pressure-cooked			[1] 60					[1] 250			½ cup	100	3.5			[1] 60		
Squash:																		
Raw:																		
Cymling		[1] 40					[1] 190				1 cup	100	3.5		[1] 40			
Hubbard		[1] 50	[1] 1		[1] 45		[1] 220	[1] 7		[1] 210	1 cup	100	3.5		[1] 50	[1] 1		[1] 45
Summer					[1] 50					[1] 240	1 cup	100	3.5					[1] 50
White bush			[1] 25					[1] 100			1 cup	100	3.5			[1] 25		
Winter			[1] 15					[1] 60			½ cup	100	3.5			[1] 15		
Zucchini			[1] 23					[1] 110			1 cup	100	3.5			[1] 25		
Baked:																		
Hubbard			[1] 7					[1] 30			½ cup	100	3.5			[1] 7		
Canned, commercial			[1] 3					[1] 10			½ cup	100	3.5			[1] 3		
Frozen:																		
Pressure-cooked:																		
Hubbard	[1] 6,000					[1] 27,240					½ cup	100	3.5	[1] 6,000				
Summer Crookneck	[1] 700					[1] 3,180					½ cup	100	3.5	[1] 700				
Strawberries:																		
Raw	[1] 50	[1] 25	60		[1] 180	[1] 230	[1] 110	270		[1] 820	12 hulled	100	3.5	[1] 50	[1] 25	60		[1] 180
Canned, commercial		[1] Nil	[1] 30				[1] Nil	[1] 140			½ cup	100	3.5		[1] Nil	[1] 30		
Suet:																		
Beef	[1] 600					[1] 2,700					1 serv	28.4	1	[1] 170				
Sweetbreads		[1] 40					[1] 180				1 pair	227	8		[1] 90			

Sweetpotatoes:																		
Raw	[1] 3,800	[1] 100	25		[1] 70	[1] 17,200	[1] 440	120		[1] 310	1	145	5.1	[1] 5,500	[1] 140	40		[1] 100
Cooked			[1] 20					[1] 100			1	180	6.3			[1] 40		
Pressure-cooked	[1] 2,800					[1] 12,800					1	180	6.3	[1] 5,100				
Tangerines (see Citrus fruit).																		
Tapioca		[1] Nil			[1] 420		[1] Nil			[1] 1,900								
Tomatoes, red:																		
Raw	[1] 1,300	[1] 80	25		45	[1] 5,900	[1] 350	110		200	1 small	100	3.5	[1] 1,300	[1] 80	25		45
Greenhouse-grown			10					50			1 small	100	3.5			10		
Canned, commercial	[1] 590		15			[1] 2,700		75			½ cup	100	3.5	[1] 590		15		
Strained	[1] 4,300	[1] 100	[1] 15			[1] 19,300	[1] 450	[1] 60			½ cup	100	3.5	[1] 4,300	[1] 100	[1] 15		
Canned, home			20					80			½ cup	100	3.5			20		
Cooked			[1] 20					[1] 100			½ cup	100	3.5			[1] 20		
Dried			[1] 60					[1] 250										
Tomatoes, yellow:																		
Raw			25					120										
Tomato juice, red:																		
Canned, commercial			[2] 20					[3] 90			½ cup	[5] 100	[6] 3.4			[2] 20		
Canned, home			[2] [3] 15					[3] 70			½ cup	[5] 100	[6] 3.4			[1] 15		
Tongue, beef:																		
Raw		[1] 280			[1] 220		[1] 1,290			[1] 1,000	5 slices	75	2.6		[1] 210			[1] 160
Cooked		[1] Nil					[1] Nil				1 serv	100	3.5		[1] Nil			
Tripe		[1] 6					[1] 25											
Trout:																		
Raw, fresh water		[1] 90					[1] 390				1 serv	100	3.5		[1] 90			
Tuna:																		
Canned, commercial	[1] 200					[1] 910												
Turbot		[1] 20			[1] 140		[1] 80			[1] 620								
Turnips:																		
Raw		[1] 60	35		[1] 40		[1] 270	160		[1] 190	¾ cup diced	100	3.5		[1] 60	35		[1] 40
Cooked			[1] 20					[1] 100			½ cup	100	3.5			[1] 20		
Turnip greens:																		
Raw	[1] 15,700	[1] 140	160			[1] 71,300	[1] 630	720			1 cup	100	3.5	[1] 15,700	[1] 140	160		
Cooked	[1] 17,500		60			[1] 79,400		290			½ cup	100	3.5	[1] 17,500		60		

[1] Value represents work from a single laboratory.
[2] Value per 100 ml.
[3] Value per pt.
[4] Value on raw-weight basis.
[5] Value in ml.
[6] Fluid oz.

Vitamin content of raw, cooked, and processed foods—Continued

Food	Vitamin value in 100 grams					Vitamin value in 1 pound					Approximate vitamin value in a common serving							
	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin	Measure	Grams	Ounces	Vitamin A value	Thiamine (vitamin B_1)	Ascorbic acid (vitamin C)	Vitamin D	Riboflavin
Veal, hindquarter:	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*	*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*				*I. U.*	*Mcg.*	*Mg.*	*I. U.*	*Mcg.*
Raw		[1] 280			[1] 240		[1] 1,300			[1] 1,100	1 serv	113.6	4		[1] 310			[1] 270
Fried		[1] [4] 240			[1] [4] 350		[1] [4] 1,100			[1] [4] 1,600	1 serv	100	3.5		[1] [4] 240			[1] [4] 350
Roasted		[1] [4] 190					[1] [4] 870				1 serv	100	3.5		[1] [4] 190			
Walnuts:																		
Raw			[1] 20					[1] 90			12 meats	14	0.5			[1] 3		
Persian (English)	[1] 40	[1] 340				[1] 180	[1] 1,600				12 meats	14	0.5	[1] 6	[1] 50			
Water cress			60					260			½ cup leaves	20	0.7			10		
Watermelons	[1] 500	[1] 70	6			[1] 2,300	[1] 310	30			1 slice, small serv	160	5.6	[1] 800	[1] 110	10		
											½ cup cubes or balls	100	3.5	[1] 500	[1] 70	6		
Wheat:																		
Raw:																		
Bran		[1] 1,400			[1] 640		[1] 6,400			[1] 2,900								
Flour:																		
White, straight		120					530				1 cup	130	4.6		150			
White, patent		60					290				1 cup	128	4.6		80			
Whole		[1] 690					[1] 3,100				1 cup	130	4.6		[1] 900			
Germ	[1] 100	2,600				[1] 450	11,600				2 T	20	0.7	[1] 20	510			
Whole grain	[1] Nil	540				[1] Nil	2,500				1 cup	200	7.0	[1] Nil	1,100			
Cooked:																		
Cracked		[1] 110					[1] 490											
Whey:																		
Dried					2,700					12,100								

Yeast:																		
Baker's:																		
Ordinary moist		910			1,800		4,100			8,400	1 square	14	0.5		130			260
Moist, high B_1		21,500			1,800		97,800			8,400	1 square	14	0.5		3,000			260
Dried		17,700			6,200		80,200			28,300	1 t	5	0.2		890			310
Dried, high B_1		[1] 67,700			[1] 5,300		[1] 307,600			[1] 24,200	1 t	5	0.2		[1] 3,400			[1] 270
Brewer's:																		
Dried, debittered		[1] 16,300			[1] 3,700		[1] 73,800			[1] 16,800	1 t	5	0.2		[1] 810			[1] 180
Primary		150					680				1 t	5	0.2		[1] 7			
Youngberries:																		
Frozen	[1] 460					[1] 2,100												

[1] Value represents work from a single laboratory.

[4] Value on raw-weight basis.

U. S. GOVERNMENT PRINTING OFFICE 1942